

Amendments to the Claims:

Please cancel claims 15 - 20 which stand withdrawn from consideration as being directed to a non-elected invention without prejudice or disclaimer of the subject matter thereof and without prejudice to the right to file a divisional application directed thereto, and amend the remaining claims as follows.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A display device including thin film transistors formed on an insulation substrate, wherein

the thin film transistor comprises a semiconductor layer, a gate electrode and a gate insulation film which is interposed between the semiconductor layer and the gate electrode, and

the carbon concentration of the gate insulation film has the distribution in which the carbon concentration is ~~smaller~~ at a side close to the semiconductor layer ~~than~~ is equal to or less than 1/10 the carbon concentration at a side remote from the semiconductor layer.

2. (currently amended) A display device ~~according to claim 1, including thin film transistors formed on an insulation substrate, wherein~~

the thin film transistor comprises a semiconductor layer, a gate electrode and a gate insulation film which is interposed between the semiconductor layer and the gate electrode, and

the carbon concentration of the gate insulation film has the distribution in which the carbon concentration is smaller at a side close to the semiconductor layer than at a side remote from the semiconductor layer;

wherein the gate insulation film includes at least one layer of deposition film which is deposited by a deposition method, and ~~the carbon concentration of one deposition film which is formed without interposing other deposition film deposited by~~ other than a deposition method and which is interposed between the one deposition film layer and the semiconductor layer, the one deposition film layer has the distribution in which the carbon concentration is smaller at a side close to the semiconductor layer than at a side remote from the semiconductor layer.

3. (currently amended) A display device ~~according to claim 2~~ including thin film transistors formed on an insulation substrate, wherein

the thin film transistor comprises a semiconductor layer, a gate electrode and a gate insulation film which is interposed between the semiconductor layer and the gate electrode, and

the carbon concentration of the gate insulation film has the distribution in which the carbon concentration is smaller at a side close to the semiconductor layer than at a side remote from the semiconductor layer;

wherein the gate insulation film includes at least one layer of deposition film which is deposited by a deposition method, and the carbon concentration of the one deposition film layer which is formed without interposing an other layer of deposition film deposited by a deposition method between the one deposition film layer and the semiconductor layer has the distribution in which the carbon concentration is smaller

at a side close to the semiconductor layer than at a side remote from the semiconductor layer;

wherein with respect to the carbon concentration of the one deposition film layer, the carbon concentration at the side close to the semiconductor layer is equal to or less than 1/10 the carbon concentration at the side remote from the semiconductor layer.

4. (currently amended) A display device according to claim 3, wherein with respect to the carbon concentration of the one deposition film layer, the carbon concentration at the side close to the semiconductor layer is  $1\text{E}20$  to  $1\text{E}21$  [ $\text{cm}^{-3}$ ] and the carbon concentration at the side remote from the semiconductor layer is  $1\text{E}21$  to  $1\text{E}22$  [ $\text{cm}^{-3}$ ].

5. (currently amended) A display device according to claim 4, wherein the one deposition film layer is a film which is deposited by a CVD method using a raw material gas containing carbons.

6. (currently amended) A display device according to claim 5, wherein the gate insulation film includes an oxide film which is formed by a method other than a deposition method between the one deposition film layer and the semiconductor layer.

7. (original) A display device according to claim 6, wherein in the thin film transistor, the semiconductor layer is arranged between the insulation substrate on which the thin film transistor is formed and the gate electrode.

8. (original) A display device according to claim 7, wherein the semiconductor layer includes a polycrystalline silicon layer.

9. (original) A display device according to claim 8, wherein the thin film transistor is an n-channel type thin film transistor.

10. (original) A display device according to claim 8, wherein the thin film transistor is an n-channel type thin film transistor having a single drain structure.

11. (original) A display device according to claim 8, wherein the thin film transistor is a p-channel type thin film transistor.

12. (original) A display device according to claim 11, wherein the semiconductor layer of the thin film transistor is a semiconductor layer having crystals having a size of 1  $\mu\text{m}$  or more when measured at least in one direction.

13. (original) A display device according to claim 12, wherein the display device is a liquid crystal display device.

14. (original) A display device according to claim 12, wherein the display device is an organic EL display device.

Claims 15 - 20 (canceled)

21. (new) A display device according to claim 1, wherein the gate insulation film is a single layer disposed between the semiconductor layer and the gate electrode.

22. (new) A display device according to claim 1, wherein the gate insulation film is a single layer of deposition film which is deposited by a deposition method and is disposed between the semiconductor layer and the gate electrode.

23. (new) A display device according to claim 1, wherein the gate insulation film includes at least one layer of deposition film which is deposited by a deposition method and at least one other layer which is formed by other than a deposition method, the at least one other layer being interposed between the at least one layer of deposition film and the semiconductor layer, and the at least one layer of deposition film having the distribution in which the carbon concentration is smaller at a side close to the semiconductor layer than at a side remote from the semiconductor layer.

24. (new) A display device according to claim 23, wherein the at least one other layer of the gate insulation film has a substantially uniform carbon concentration.

25. (new) A display device according to claim 24, wherein the substantially uniform carbon concentration of the at least one other layer of the gate insulation film is smaller than the smallest carbon concentration of the at least one layer of deposition film.